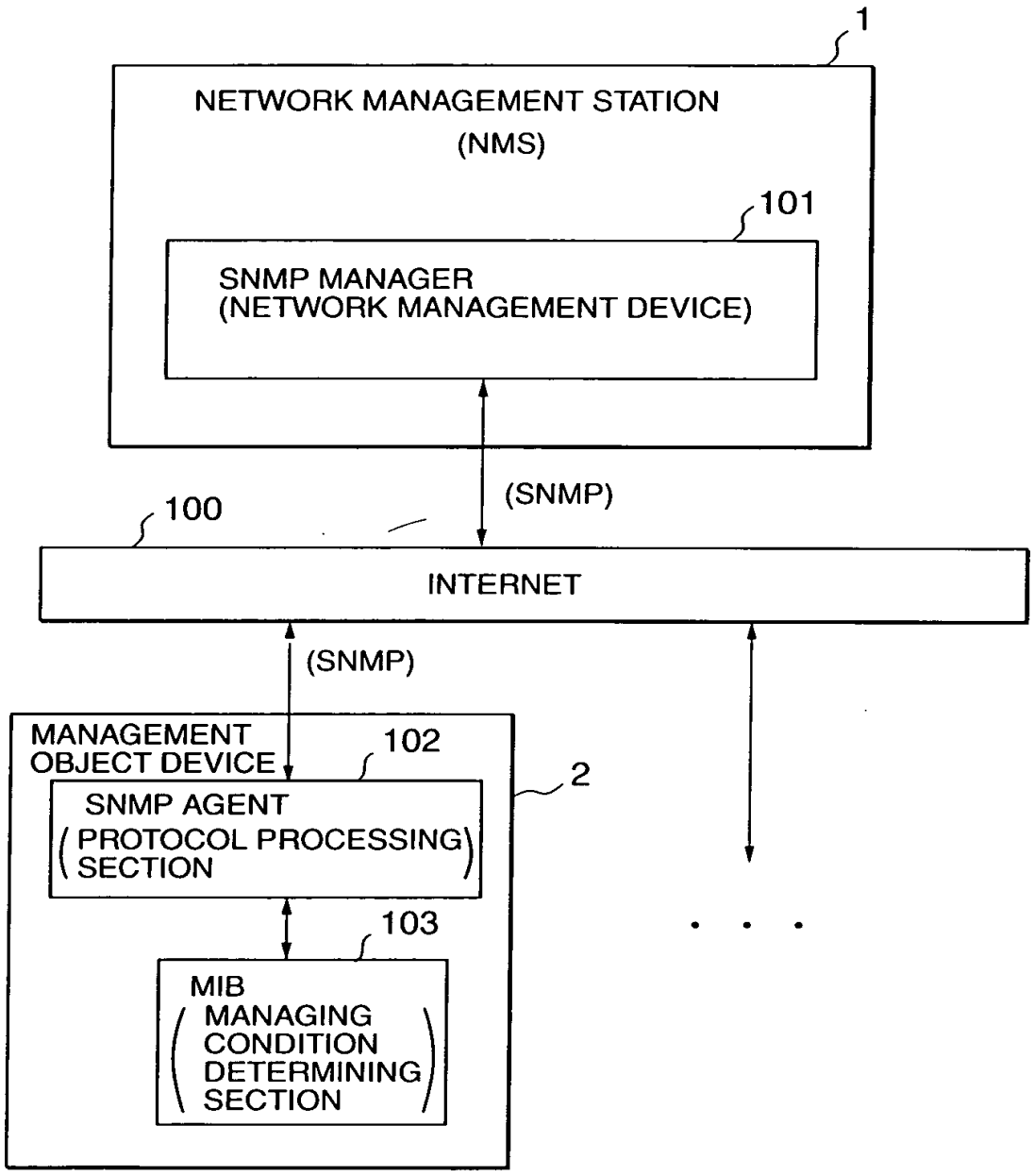
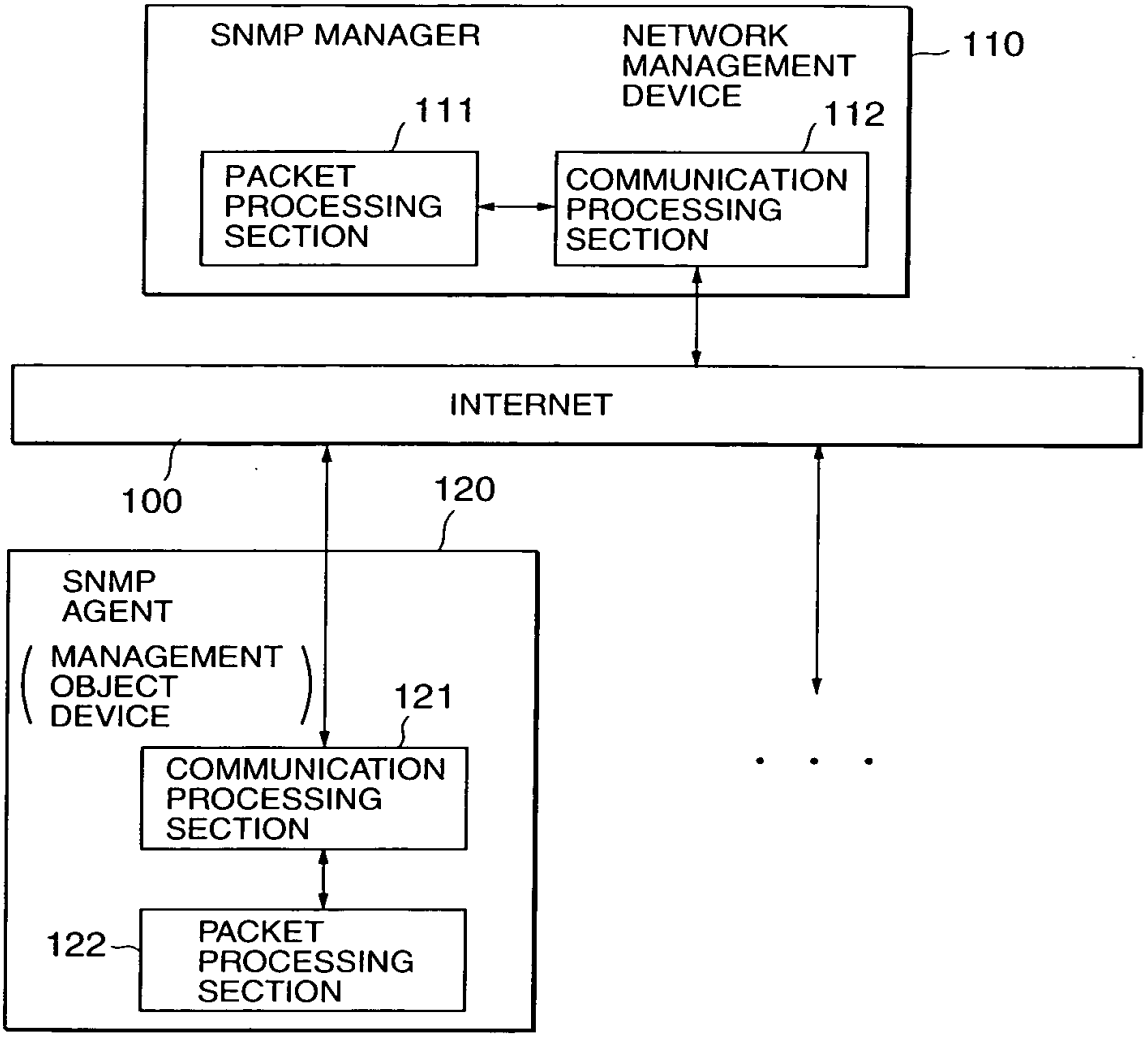


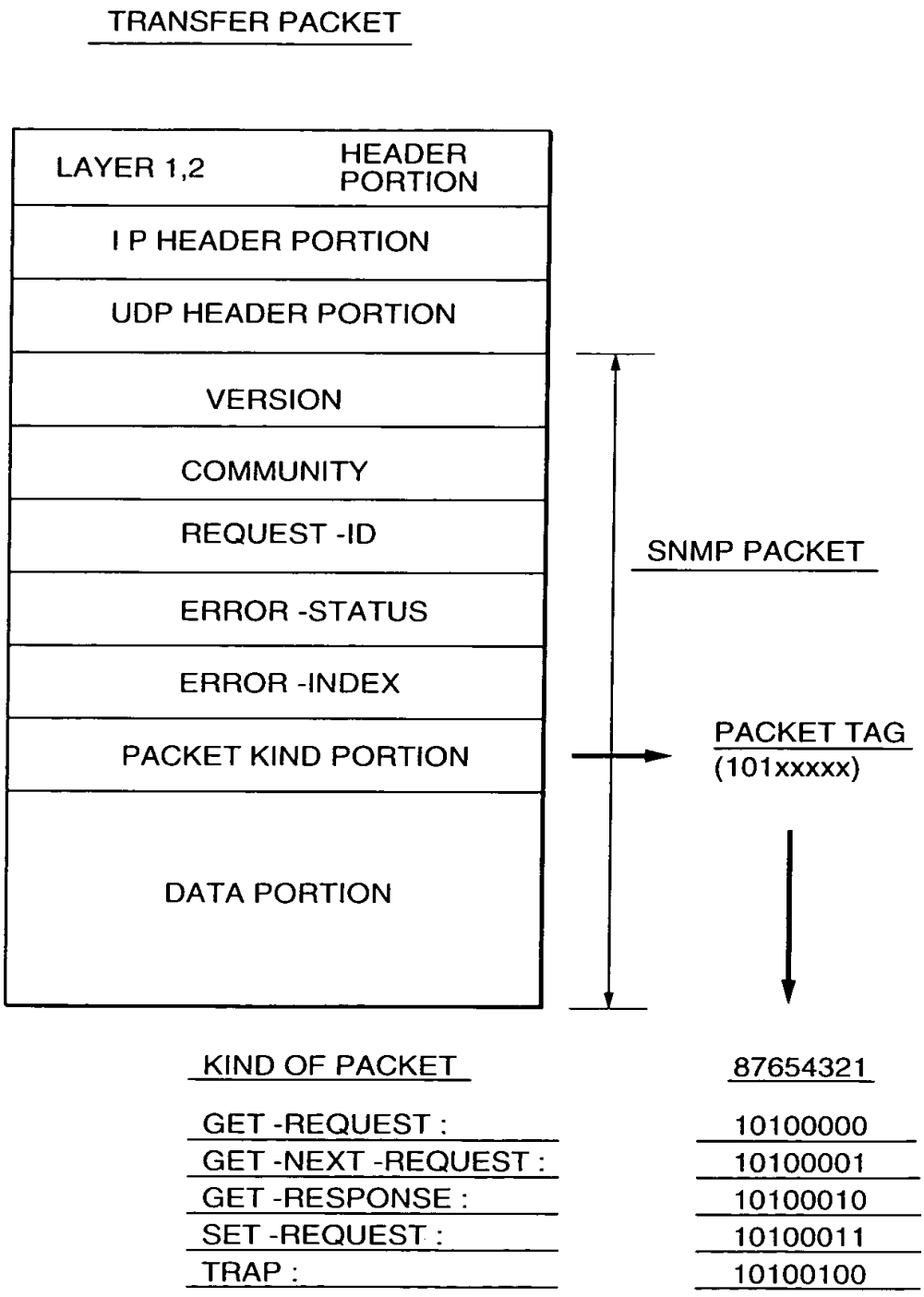
PRIOR ART

FIG.1



PRIOR ART

FIG.2



PRIOR ART

FIG.3

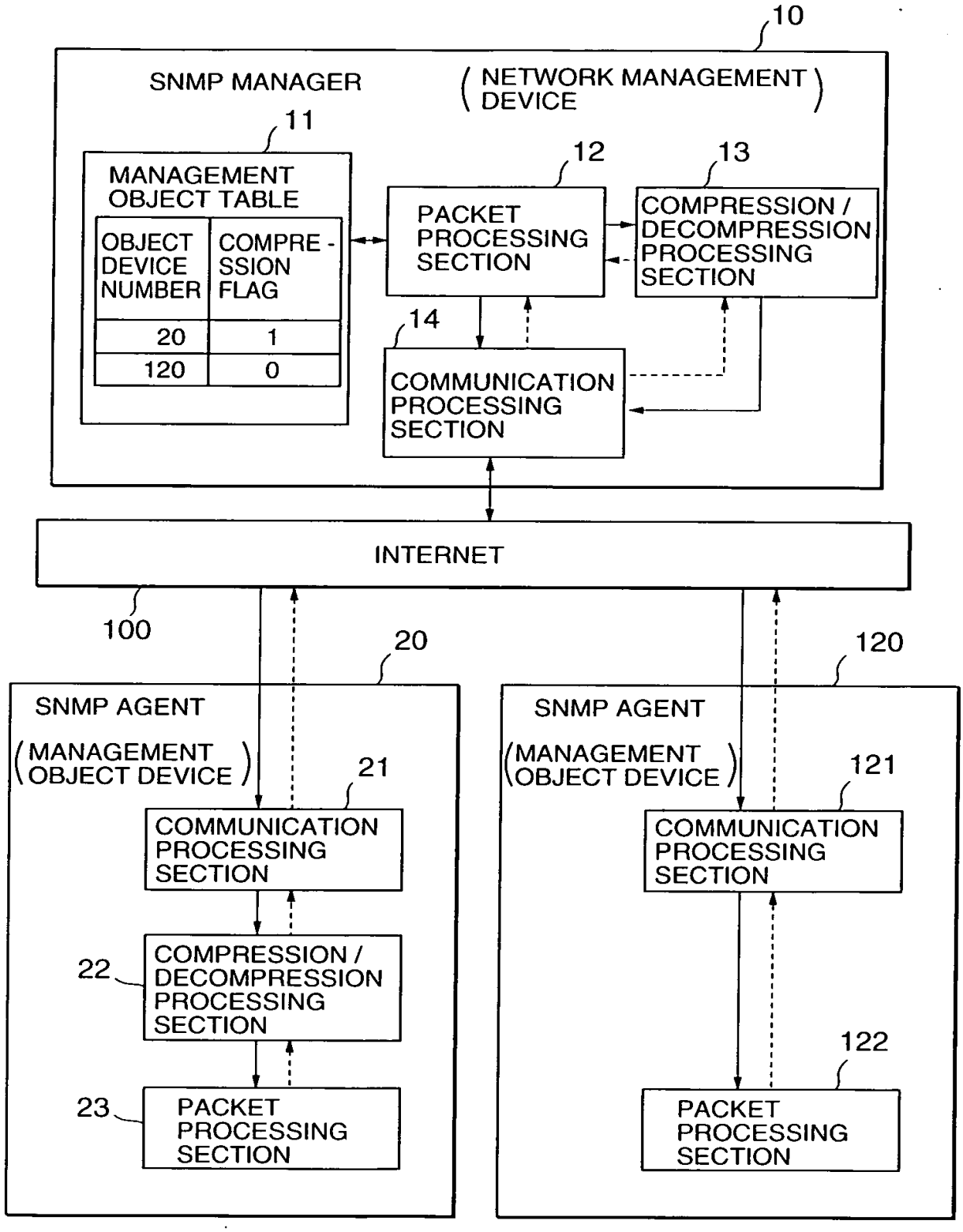
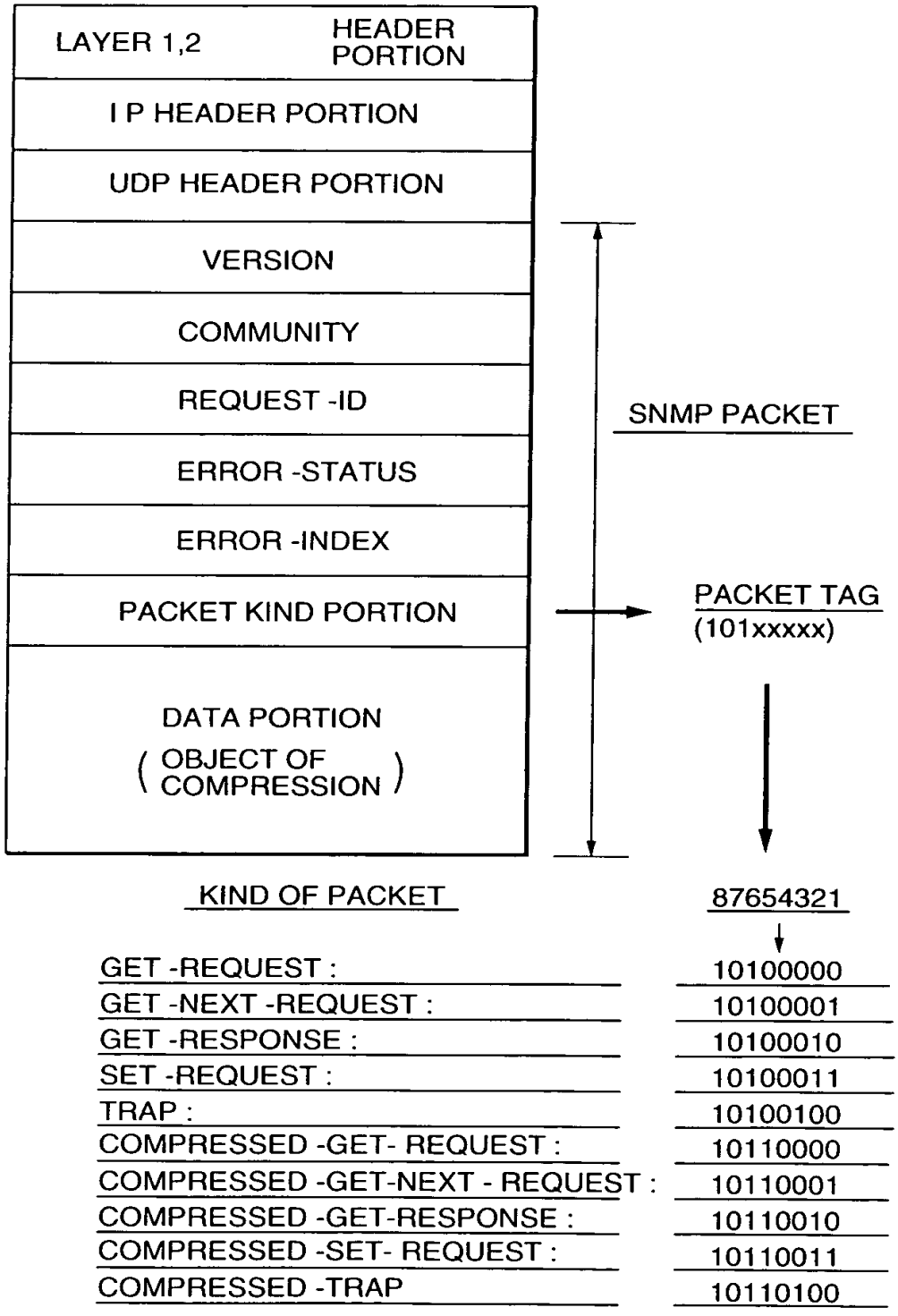

10
SNMP MANAGER
(NETWORK MANAGEMENT DEVICE)
11
MANAGEMENT OBJECT TABLE
OBJECT DEVICE NUMBER
COMPRE - SSION FLAG
20
1
120
0
12
PACKET PROCESSING SECTION
13
COMPRESSION / DECOMPRESSION PROCESSING SECTION
14
COMMUNICATION PROCESSING SECTION
INTERNET
100
20
SNMP AGENT
(MANAGEMENT OBJECT DEVICE)
21
COMMUNICATION PROCESSING SECTION
22
COMPRESSION / DECOMPRESSION PROCESSING SECTION
23
PACKET PROCESSING SECTION
120
SNMP AGENT
(MANAGEMENT OBJECT DEVICE)
121
COMMUNICATION PROCESSING SECTION
122
PACKET PROCESSING SECTION

FIG.4

TRANSFER PACKET



KIND OF PACKET	87654321
GET -REQUEST :	10100000
GET -NEXT -REQUEST :	10100001
GET -RESPONSE :	10100010
SET -REQUEST :	10100011
TRAP :	10100100
COMPRESSED -GET- REQUEST :	10110000
COMPRESSED -GET-NEXT - REQUEST :	10110001
COMPRESSED -GET-RESPONSE :	10110010
COMPRESSED -SET- REQUEST :	10110011
COMPRESSED -TRAP	10110100

FIG.5

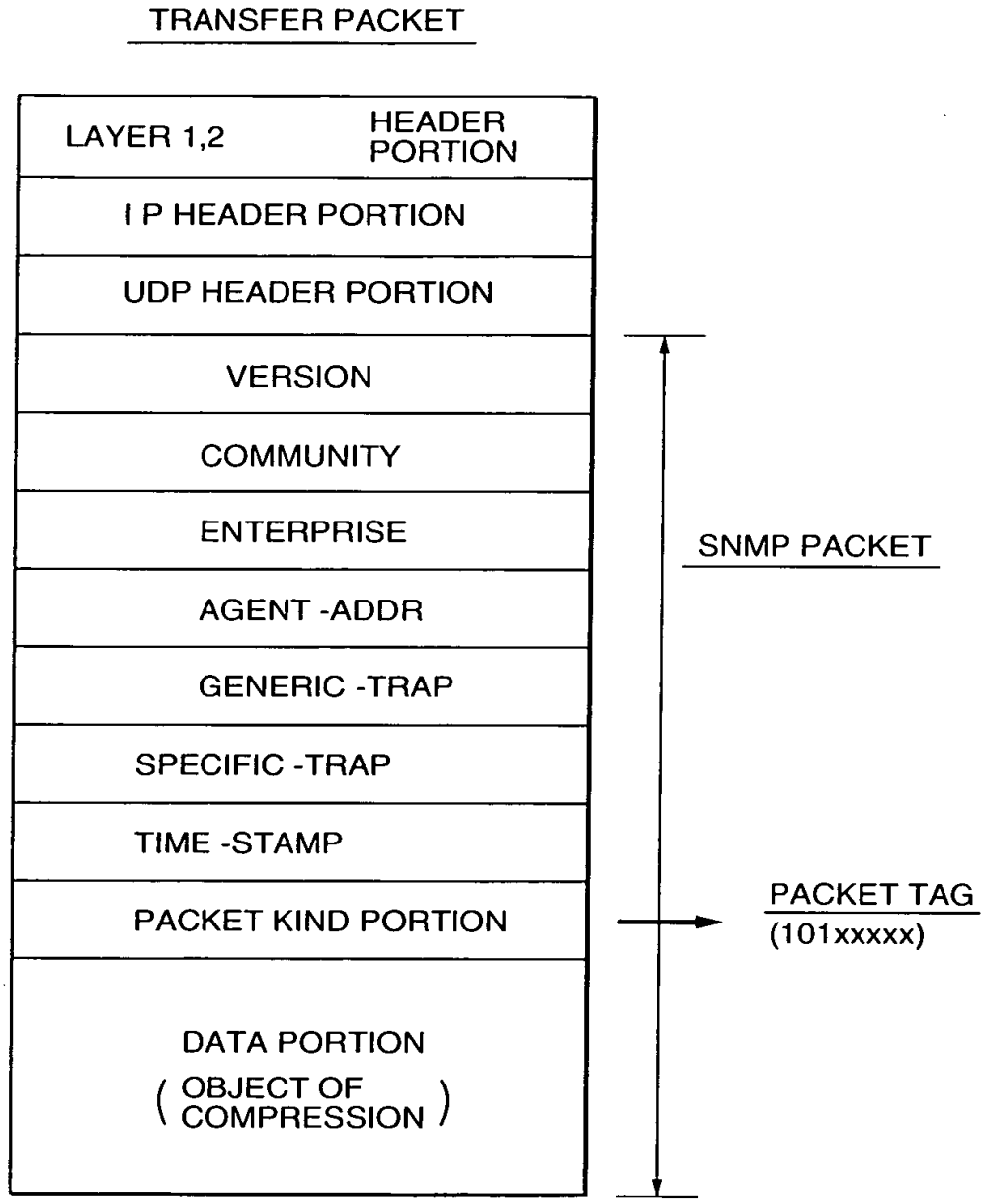

TRANSFER PACKET
LAYER 1,2
HEADER PORTION
I P HEADER PORTION
UDP HEADER PORTION
VERSION
COMMUNITY
ENTERPRISE
AGENT -ADDR
GENERIC -TRAP
SPECIFIC -TRAP
TIME -STAMP
PACKET KIND PORTION
DATA PORTION
(OBJECT OF COMPRESSION)
SNMP PACKET
PACKET TAG
(101xxxxx)

FIG.6

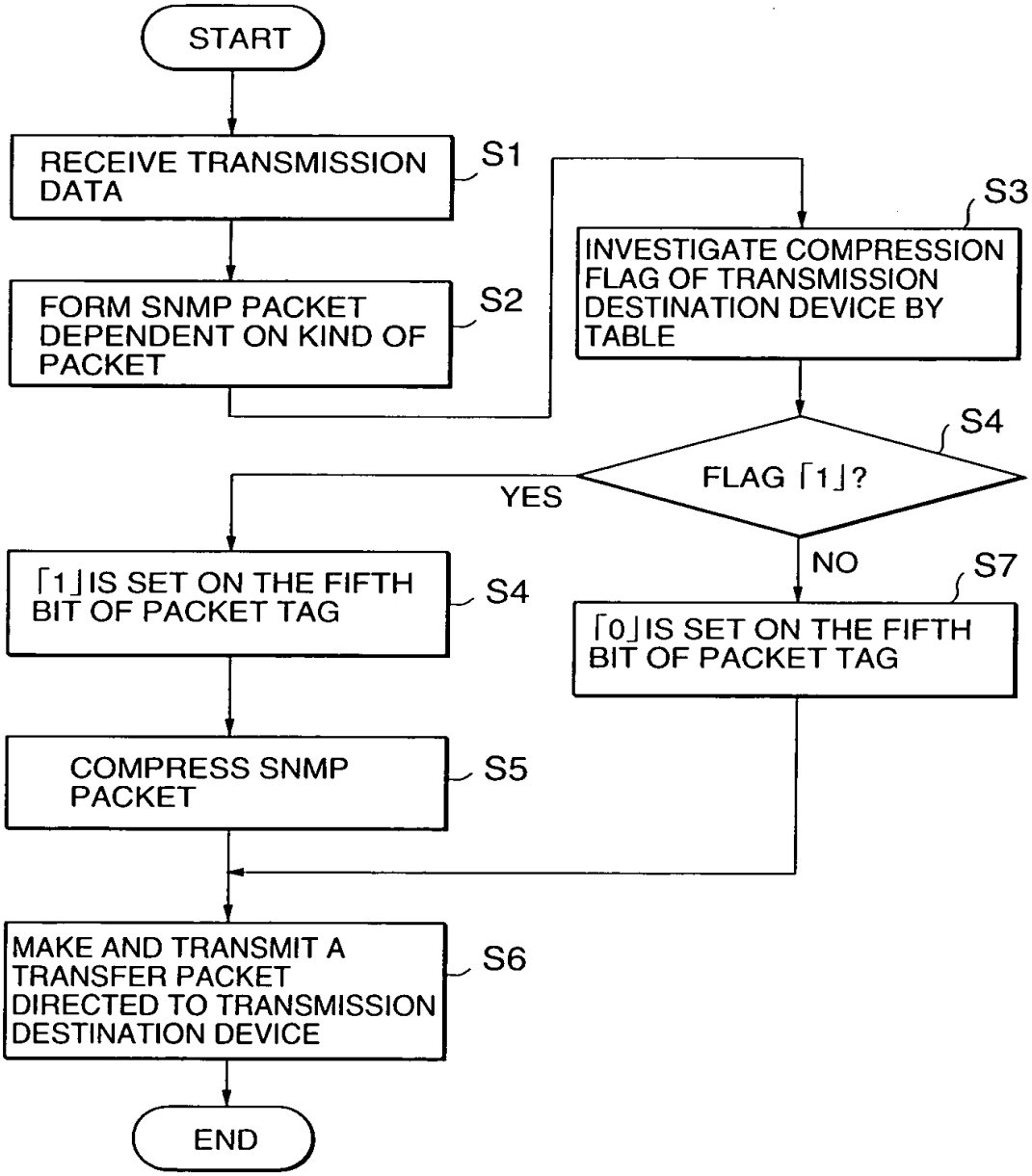

START
RECEIVE TRANSMISSION DATA
S1
FORM SNMP PACKET DEPENDENT ON KIND OF PACKET
S2
INVESTIGATE COMPRESSION FLAG OF TRANSMISSION DESTINATION DEVICE BY TABLE
S3
FLAG 「1」?
S4
YES
NO
「1」IS SET ON THE FIFTH BIT OF PACKET TAG
S4
「0」IS SET ON THE FIFTH BIT OF PACKET TAG
S7
COMPRESS SNMP PACKET
S5
MAKE AND TRANSMIT A TRANSFER PACKET DIRECTED TO TRANSMISSION DESTINATION DEVICE
S6
END

FIG.7

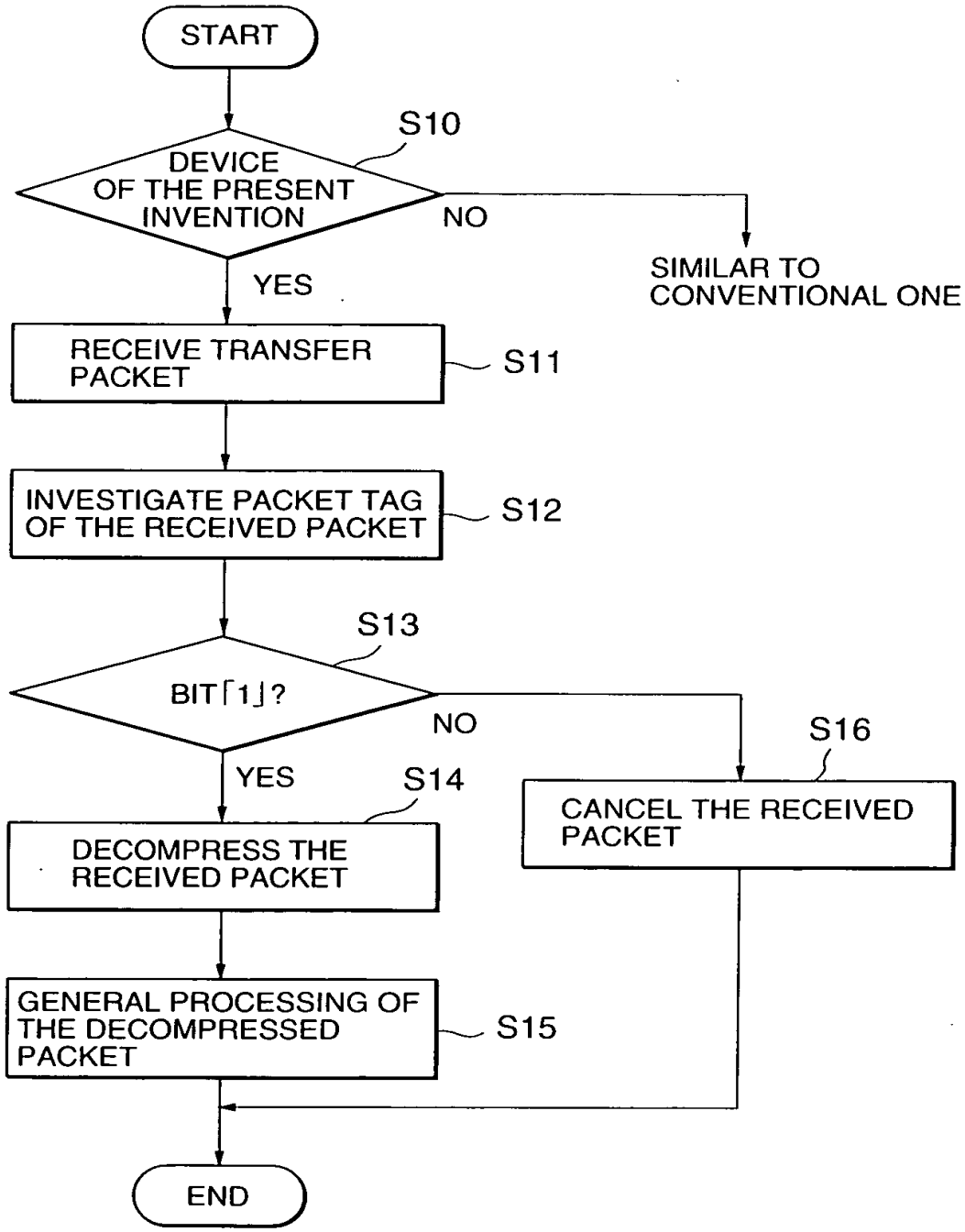

START
S10
DEVICE OF THE PRESENT INVENTION
NO
SIMILAR TO CONVENTIONAL ONE
YES
RECEIVE TRANSFER PACKET
S11
INVESTIGATE PACKET TAG OF THE RECEIVED PACKET
S12
S13
BIT「1」?
NO
S16
YES
S14
CANCEL THE RECEIVED PACKET
DECOMPRESS THE RECEIVED PACKET
GENERAL PROCESSING OF THE DECOMPRESSED PACKET
S15
END

FIG.8

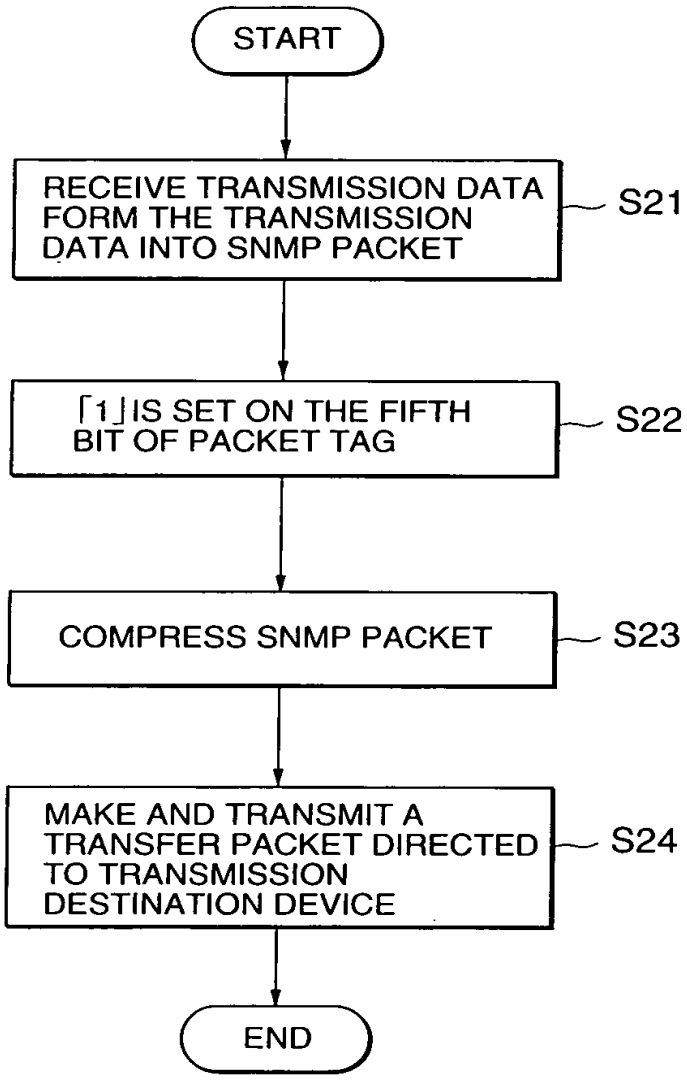

START
RECEIVE TRANSMISSION DATA FORM THE TRANSMISSION DATA INTO SNMP PACKET
S21
「1」IS SET ON THE FIFTH BIT OF PACKET TAG
S22
COMPRESS SNMP PACKET
S23
MAKE AND TRANSMIT A TRANSFER PACKET DIRECTED TO TRANSMISSION DESTINATION DEVICE
S24
END

FIG.9

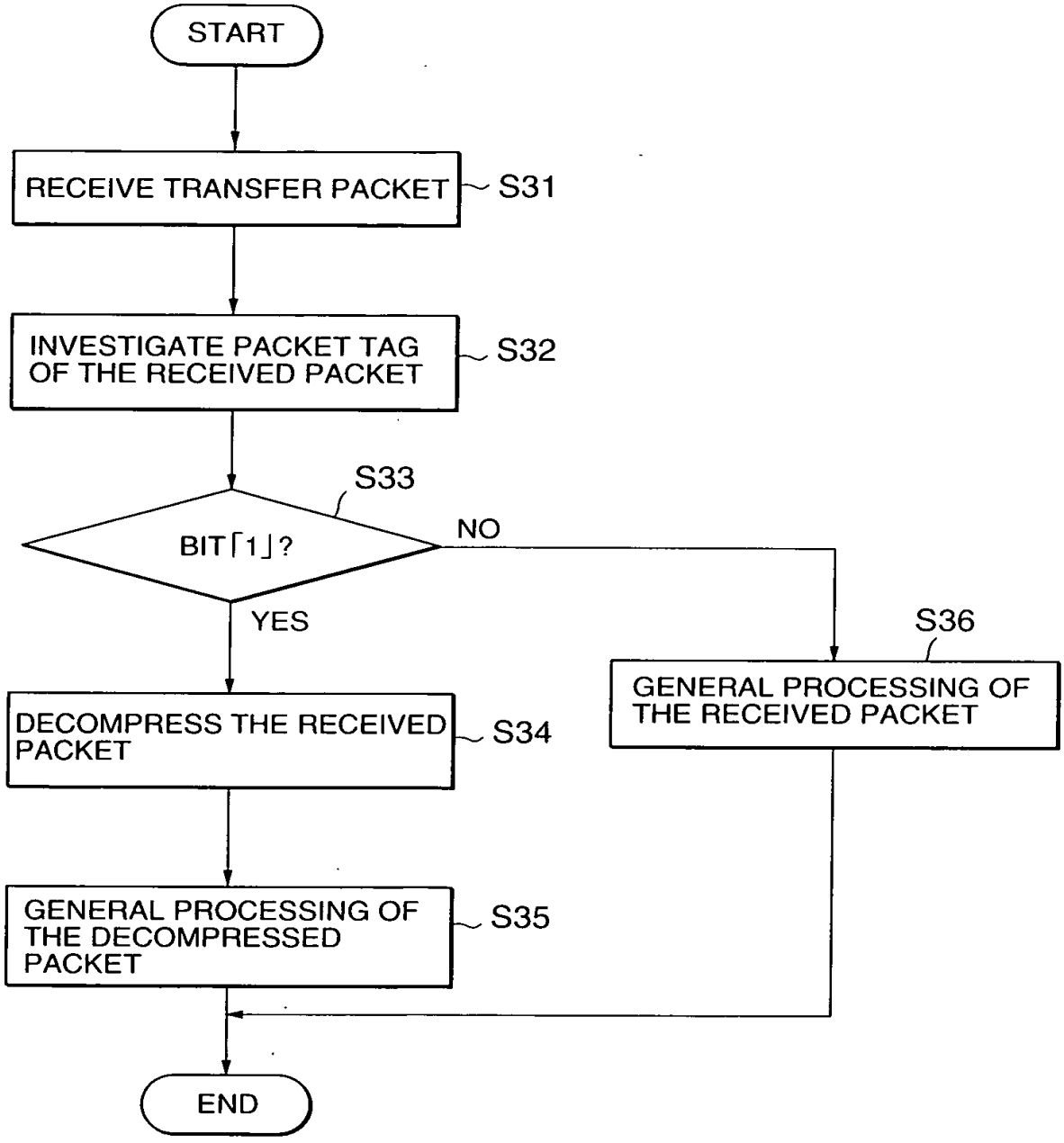

START
RECEIVE TRANSFER PACKET
S31
INVESTIGATE PACKET TAG OF THE RECEIVED PACKET
S32
S33
BIT「1」?
NO
YES
S36
GENERAL PROCESSING OF THE RECEIVED PACKET
DECOMPRESS THE RECEIVED PACKET
S34
GENERAL PROCESSING OF THE DECOMPRESSED PACKET
S35
END

FIG.10